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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/708,036	02/04/2004	Ashok V. Joshi	MIC 011125CO01	2035
55162	7590	06/03/2008		
CERAMATEC, INC. 2425 SOUTH 900 WEST SALT LAKE CITY, UT 84119			EXAMINER GHALI, ISIS A D	
			ART UNIT 1611	PAPER NUMBER
			MAIL DATE 06/03/2008	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/708,036	Applicant(s) JOSHI, ASHOK V.	
	Examiner Isis A. Ghali	Art Unit 1611	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 March 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-10 and 15-24 is/are pending in the application.
- 4a) Of the above claim(s) 5-10 and 15-24 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 3, 4 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

The receipt is acknowledged of applicants' request for RCE and amendment, both filed 10/24/2007; and election and amendment, both filed 03/17/2008.

Claims 2, and 11-14 have been canceled, and claims 21-24 have been added.

Claims 1, 3-10, and 15-24 are pending.

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 10/24/2007 has been entered.

Election/Restrictions

2. Applicant's election of invention I, and species: Nasicon, water insoluble peroxide, paste in the reply filed on 03/17/2008 is acknowledged based on applicants' indication in their response that they canceled/deleted non-elected species.

Art Unit: 1611

Accordingly, newly added claims 21-24 have been withdrawn as being directed to non-elected species. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

3. Claims 5-10, 15-24 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected inventions and species, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 03/17/2008.

Claims 1, 3 and 4 are included in the prosecution.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation

Art Unit: 1611

under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 1, 3 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 5,985,388 ('308) in view of the article "Sol-Gel processing of NASICON thin film using aqueous complex precursor" by Shimizu et al. and US 5,656,037 ('037).

US '308 teaches material useful in medical devices such as wound dressing or prepared in ointment, solution or paint, i.e. support and substrate (abstract; col.4, lines 20-23; col.7, lines 11-21, lines 35-42; col.8, lines 17-). The silver oxide deposited with atom molecules of a different material. The different material includes metals such as Ti, Zn, Si, or oxides or halides thereof, that read on reactive material (col.7, lines 11-21) and this reads on the metal ion exchanged membrane.

Although US '308 teaches ion exchange membrane and reactive metal oxides, however, the reference does not explicitly teach Nasicon as a support material or water insoluble peroxide as reactive material as claimed by claim 1.

Shimizu et al. teaches that Nasicon is known to have high ionic conductivity and high chemical stability (introduction).

US '037 teaches insoluble peroxide such as magnesium peroxide deposited on natural and synthetic substrates because insoluble peroxides show bactericidal effect

Art Unit: 1611

and inhibit growth and spread of odor and disease-causing gram-positive and gram-negative bacteria (abstract; col.9, line 29-31).

Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention to provide medical device such as wound dressing comprising support and metal oxide deposited on the support by ion exchanged forming ion exchange membrane as disclosed by US '308, and replace the support with Nasicon because Nasicon disclosed by Shimizu to have high ionic conductivity and high chemical stability, and further replace the metal oxide with insoluble peroxides because US '037 teaches insoluble peroxides show bactericidal effect and inhibit growth and spread of odor and disease-causing gram-positive and gram-negative bacteria, with reasonable expectation of having medical devices comprising support of Nasicon and insoluble peroxide deposited on the support wherein the device shows chemical stability and effective bactericidal effect, such characters are desirable for medical devices.

7. Claims 1, 3 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 6,333,093 ('093) in view of the article "Sol-Gel processing of NASICON thin film using aqueous complex precursor" by Shimizu et al. and US 5,656,037 ('037).

US '093 disclosed wound dressing where the skin contacting surface comprises substrate associated with metal selected from the group comprising silver (abstract; col.3, lines 1-7; col.5, line 40). The skin-contacting layer comprises matrix that incorporates the silver oxide deposited with atom molecules of a different material. The

Art Unit: 1611

different material includes metals such as Ti, Zn, Si, or oxides or halides thereof (col.3, lines 8-13); and this reads on the metal ion exchanged membrane.

Although US '093 teaches ion exchange membrane and reactive metals, however, the reference does not explicitly teach Nasicon as a support material or water insoluble peroxide as reactive material as claimed by claim 1.

Shimizu et al. teaches that Nasicon is known to have high ionic conductivity and high chemical stability (introduction).

US '037 teaches insoluble peroxide such as magnesium peroxide deposited on natural and synthetic substrates because insoluble peroxides show bactericidal effect and inhibit growth and spread of odor and disease-causing gram-positive and gram-negative bacteria (abstract; col.9, line 29-31).

Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention to provide medical device such as wound dressing comprising support and reactive metals deposited on the support by ion exchanged forming ion exchange membrane as disclosed by US '093, and replace the support with Nasicon because Nasicon disclosed by Shimizu to have high ionic conductivity and high chemical stability, and further replace the metal oxide with insoluble peroxides because US '037 teaches insoluble peroxides show bactericidal effect and inhibit growth and spread of odor and disease-causing gram-positive and gram-negative bacteria, with reasonable expectation of having medical devices comprising support of Nasicon and insoluble peroxide deposited on the support wherein the device shows chemical stability and effective bactericidal effect, such characters are desirable for medical devices.

Response to Arguments

8. Applicant's arguments with respect to claims 1, 3 and 4 have been considered but are moot in view of the new ground(s) of rejection.

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US 6,267,782 disclosed medical articles with adhered antimicrobial elemental metals.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Isis A. Ghali whose telephone number is (571) 272-0595. The examiner can normally be reached on Monday-Thursday, 6:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Woodward can be reached on (571) 272-8373. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should

Art Unit: 1611

you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Isis A Ghali/
Primary Examiner, Art Unit 1611

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